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GETTING UP TO SPEED ON THE ENERGY AND TECHNOLOGY COMMITTEE

By: Lee R. Hansen, Associate Analyst

The Energy and Technology Committee at a Glance…

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This report provides a brief introduction to the Energy and Technology Committee. It addresses:

- What issues fall under the committee's jurisdiction?
- What departments and agencies does the committee routinely interact with and what do they do?
- What's the difference between the electric transmission and distribution systems?
- How did deregulation change the way we pay for electricity?
- What's the renewable portfolio standard (RPS)?
- What are property assessed clean energy (PACE) programs?
- What are some of the laws the committee has recently passed?

Phone (860) 240-8400
http://www.cga.ct.gov/olr
olr@cga.ct.gov

Connecticut General Assembly
Office of Legislative Research
Stephanie A. D'Ambrose, Director

Room 5300
Legislative Office Building
Hartford, CT 06106-1591

What Issues Fall Under the Committee's Jurisdiction?

The Short Answer:

The Energy Committee has cognizance of all matters relating to (1) the Public Utilities Regulatory Authority and (2) energy, energy policy planning and regulation, telecommunications, information systems, and related technology.

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Let's Look It Up!

The committee's jurisdiction is specified in the Joint Rules of the Senate and the House of Representatives.

Most of the Energy Committee's statutes can be found in Title 16 and Title 16a of the Connecticut General Statutes.

The Energy and Technology Committee has jurisdiction over energy-related issues, regulated utility and telecommunication companies, and information systems. Historically, it has been particularly involved in regulating (and deregulating) the electric companies, cable companies, telecommunications companies, and investor-owned water companies. It has also been behind numerous renewable energy and energy efficiency initiatives.

The committee shares jurisdiction with the Environment Committee over facility siting issues. While the Energy Committee oversees investor-owned water company rates, issues concerning water quality fall under the Public Health Committee and issues regarding water supply fall under the Environment Committee. The Planning and Development Committee has primary jurisdiction over municipal utility companies.

The Energy Committee has little or no jurisdiction over cable TV rates and programming, cell phone rates and service, internet providers and service, wholesale electric and gas rates, and any siting of wireless facilities (e.g., cell towers) that is specifically related to electric magnetic fields. All of these issues fall under federal jurisdiction.

To Learn More, Read:

OLR Report 2012-R-0194, *A La Carte Cable TV Options*

OLR Report 2012-R-0245, *State and Federal Law on Non-Ionizing Radiation*

OLR Report, 2013-R-0240, *State Jurisdiction Over Telecommunications Services Charges*

OLR Report 2014-R-0014, *OLR Backgrounder: Energy Acronyms and Abbreviations*

What Role Does the Department of Energy and Environmental Protection (DEEP) Play?

The Short Answer:

DEEP's Bureau of Energy and Technology Policy develops statewide energy policy, with emphases on energy supply, energy demand, and climate change. It plays a central role in developing the state's Comprehensive Energy Strategy and Integrated Resource Plan.

Department of Energy and Environmental Protection

Let's Look It Up!

CGS § 22a-2d establishes DEEP and lists its energy policy and regulation goals.

CGS § 16a-3d outlines the purpose and procedure for preparing the CES.

CGS § 16a-3a outlines the purpose and procedure for preparing the IRP.

PA 11-80 merged the former Department of Environmental Protection and Department of Public Utilities Control to create DEEP. DEEP is the state agency that, among other things, (1) develops plans for energy infrastructure; (2) regulates air emissions, wastewater discharges, and other pollution; and (3) preserves and manages statewide recreational lands.

Among DEEP's most significant energy-related responsibilities are preparing the state's Comprehensive Energy Strategy (CES) and the Integrated Resources Plan (IRP).

The CES is an assessment and strategy for all residential, commercial, and industrial energy issues, including energy efficiency, industrial energy needs, electricity, natural gas, and transportation. The current CES was issued in February 2013 and must be revised by October 2016.

The IRP assesses future electric needs and plans to meet those needs. It looks at both demand side resources (conservation, energy efficiency, etc.) and supply side resources (generation/power plants, transmission lines, etc.) in its assessment and recommendations. The most recent IRP was issued in June 2012. DEEP recently released a draft 2014 IRP which should be finalized during the first half of 2015.

To Learn More, Read:

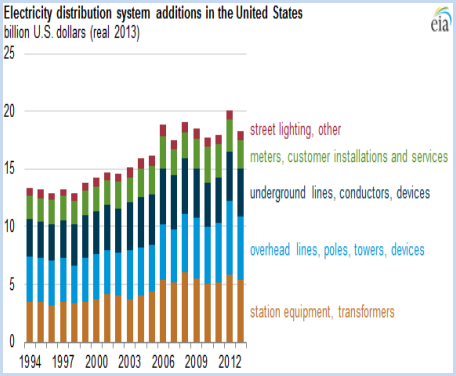
OLR Report 2013-R-0163, *Comprehensive Energy Strategy*

OLR Report 2012-R-0286, *Integrated Resources Energy Plan*

What Role Does the Public Utilities Regulatory Authority Play?

The Short Answer:

PURA regulates the rates and services of the state's investor-owned electricity, natural gas, and water companies. In the industries that are still wholly regulated, PURA must balance the public's right to safe, adequate, and reliable utility service at reasonable rates with the provider's right to a reasonable return on its investment.



U.S. Energy Information Administration

Let's Look It Up!

CGS § 16-2 establishes PURA and its membership.

CGS § 16-19 establishes the rate case process.

CGS § 16-19e establishes the general principles PURA must follow when setting rates.

Formerly known as the Department of Public Utilities Control, the Public Utilities Regulatory Authority (PURA) is responsible for regulating the state's utility companies' rates and services. It has three utility commissioners, all of whom are appointed by the governor, with the legislature's advice and consent. It is administratively within DEEP, but funded by a charge paid by the companies it regulates.

PURA primarily has jurisdiction over the investor-owned utility companies, like CL&P, UI, Yankee Gas, and CT Water. It has very limited jurisdiction over telecommunications and cable TV (e.g. certain consumer protection issues), and municipal utility companies (e.g. winter utility termination prohibitions).

One of PURA's most significant responsibilities is setting rates for investor-owned electric, gas, and water companies. It does this through a trial-like proceeding known as a "docket," in which a utility company presents evidence supporting its requested rate change. Other parties, such as the Office of Consumer Counsel and the Attorney General's Office also participate.

PURA's rate-related decisions must be consistent with certain principles laid out in statute and the CES.

To Learn More, Read:

OLR Report 2010-R-0146, *Primer on Electric Rate Setting* (Although the report describes the former DPUC's procedure, it reflects the procedure currently used by PURA.)

What Other Agencies Does the Committee Interact With?

The Short Answer:

The committee often interacts with, and passes legislation that directly affects the Connecticut Siting Council, OCC, and the Connecticut Green Bank.

Decisions and actions by agencies outside the committee's jurisdiction, like ISO-NE and FERC, can also have an impact on subjects before the committee.

Let's Look It Up!

The Public Utility Environmental Standards Act (CGS § 16-50g et seq.) establishes the Siting Council and procedures before it.

CGS § 16-2a establishes the OCC and its powers.

CGS § 16-245n establishes the Connecticut Green Bank and the Clean Energy Fund.

The **Connecticut Siting Council** is an independent body that regulates siting of power facilities, transmission lines, and telecommunication facilities. Its decisions must follow guidelines laid out in statute.

The **Office of Consumer Counsel** (OCC) is an independent state agency with statutory responsibility to represent customers of the state's regulated utilities in proceedings before PURA.

The **Connecticut Green Bank** (formerly the Clean Energy Finance and Investment Authority or CEFIA) is a quasi-public agency that leverages public and private funds to provide financing for homeowners, businesses, and other institutions to install or use renewable energy or conserve energy. Its public funding comes from the Clean Energy Fund.

The **Independent System Operator-New England** (ISO-NE) administers the regional wholesale electric market and runs the regional power grid by dispatching (turning on and off) power plants and other resources to meet electric demand. The state has no jurisdiction over ISO-NE, although its policy decisions do affect it.

The **Federal Energy Regulatory Commission** (FERC) regulates the wholesale markets and interstate transmission of electricity, natural gas, and oil, and also licenses hydropower facilities.

To Learn More, Read:

OLR Report 2010-R-0387, *Independent System Operator New England*

OLR Report 2013-R-0175, *Clean Energy Finance and Investment Authority Initiatives*

OLR Report 2013-R-0378, *Telecommunication Tower Siting*

What's the Difference Between the Electric Transmission and Distribution Systems?

Transmission Lines

Photo by Chris Hunkeler / CC BY-SA 2.0

Substation

Photo by Jym Ferrier / CC BY-NC-SA 2.0

Distribution Lines

Photo by Patrick Michael Mcleod / CC BY-NC-SA 2.0

Transmission System: Connecticut's electric system is part of the regional electric grid run by ISO-NE. In it, power generators from throughout New England send their power onto the grid over the electric transmission system (i.e., the thick, high voltage cables strung long distances across high towers). FERC has primary jurisdiction over setting the rates for electric transmission. State law requires PURA to modify retail transmission rates to reflect changes in the FERC-approved rates (this is referred to as an "adjustment clause").

Distribution System: The grid's transmission lines connect to local electric substations where the power is converted to a lower voltage and fed to the distribution system (i.e., the narrower power lines strung on street level utility poles or buried underground) to meet consumer demand (often referred to as "load").

The electric distribution companies (CL&P and UI) own and charge customers for using their distribution systems at rates determined by PURA. Charges for electric generation depend on whether the consumer chooses to get their electricity from a retail supplier or the distribution company.

To Learn More, Read:

OLR Report 2004-R-0501, *Paying for Electric Transmission Lines*

OLR Report 2004-R-0896, *Electric Transmission Lines-Regulatory Authorities*

OLR Report 2011-R-0338, *Undergrounding Electric Lines*

How Did Deregulation Change How We Pay For Electricity?

The Short Answer:

Electric companies used to generate electricity and sell it to customers. But deregulation allowed customers to instead purchase their electricity generation from retail suppliers (a list of suppliers and their offers can be found here). Customers who choose not to contract with a supplier get their power through their electric company's standard offer. But since the electric companies can no longer generate electricity, power from suppliers or the standard offer is ultimately purchased on the regional wholesale electricity market.

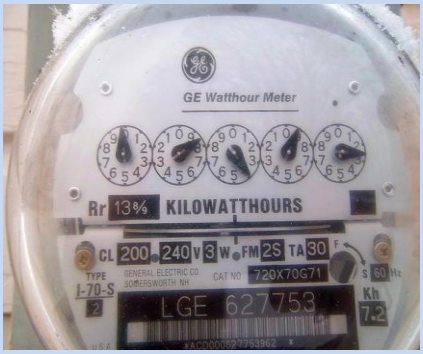


Photo by Joe / CC BY-NC-ND 2.0

Let's Look It Up!

CGS § 16-244 et seq. is where most of PA 98-28 was codified, although significant aspects of it can also be found throughout Title 16.

Prior to deregulation, the electric companies (CL&P and UI) generated and distributed electricity to their customers. Among other things, PA 98-28 required the companies to sell their power plants and allowed customers to purchase their electric generation from a retail electric supplier instead of the electric company.

Suppliers purchase electricity from generators on the regional wholesale market and resell it to retail customers through a wide variety of variable and fixed rate plans and prices. The power is distributed through the electric companies' distribution systems and the customer pays one charge to the supplier for the electricity used and another charge to the electricity company for the distribution costs.

Customers who choose not to get their generation through a retail supplier get their electricity through the "standard offer" provided by their electric company. The company purchases the power for its standard offer customers from the wholesale market and passes the cost directly to those customers with no markup. A procurement manager in PURA oversees the purchases and PURA approves the standard offer rate, which is adjusted to reflect the company's purchasing costs every six months.

To date, roughly 39% of CL&P and UI customers receive their electric generation from a retail supplier.

To Learn More, Read:

OLR Report 98-R-0775, *Electric Restructuring Bill*

OLR Report 2002-R-0541, *Electric Deregulation Timetable*

OLR Report 2003-R-0489, *2003 Changes in the Electric Restructuring Law*

What's the Renewable Portfolio Standard?

The Short Answer:

The RPS requires a portion of the electricity we use to come from certain clean energy sources.

An electric company or supplier that does not meet the RPS must pay an alternative compliance payment (ACP) of 5.5 cents per kilowatt-hour for the shortfall. By law, ACP-generated revenue must be used to offset ratepayer costs.

Photo by Matthew Faltz / CC BY 2.0

Let's Look It Up!

CGS § 16-1 (26), (27), and (44) define Class I, Class II, and Class III resources.

CGS § 16-245a defines the RPS requirements.

The Renewable Portfolio Standard (RPS) requires electric companies and competitive suppliers to procure part of their power from renewable and other clean energy resources. The companies and suppliers can meet the RPS by directly contracting to buy renewable energy or buying renewable energy credits (RECs) on the regional wholesale market.

The law defines three classes of resources:

- Class I resources include solar and wind power, among other things.
- Class II includes power from trash-to-energy facilities and biomass (e.g. wood) facilities not included in Class I.
- Class III resources include the power produced from certain cogeneration and waste heat recovery systems and the energy saved from certain conservation programs.

The RPS requirement for using Class I resources will be 12.5% in 2015. It increases over time, rising to 20% in 2020. The companies and suppliers must obtain an additional (1) 3% of their power from either class I or II resources and (2) 4% of their power from class III resources.

To Learn More, Read:

OLR Report 2013-R-0137, *Renewable Portfolio Standard Primer*

OLR Report 2013-R-0205, *DEEP Renewable Portfolio Study*

OLR Public Act Summary for PA 13-303

What are Property Assessed Clean Energy Programs?

The Short Answer:

PACE programs provide low interest loans for clean energy projects. The loans are backed by a lien on the property and repaid through a tax assessment.

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Let's Look It Up!

CGS § 7-121n allows municipalities to establish PACE programs under certain conditions.

CGS § 16a-40g requires the Green Bank to establish the C-PACE program.

In general, property assessed clean energy (PACE) programs allow municipalities to provide loans to finance clean energy projects (e.g., install solar panels). The loans, which are repaid through a property tax assessment, generally come with lower interest rates because they are backed by a tax lien on the property.

In 2010 and 2011, the Federal Housing Finance Agency (FHFA) raised concerns over residential PACE liens and stopped mortgages for properties with PACE liens from being sold on the secondary mortgage market. This in turn, stopped the implementation of residential PACE programs in Connecticut and many other states.

In 2012, Connecticut enacted legislation that authorized PACE programs for commercial properties, which were not affected by FHFA's actions. Under the subsequent C-PACE program administered by the Green Bank, commercial property owners in participating municipalities can finance clean energy improvements for their buildings, with the cost repaid using a special assessment similar to a sewer assessment. As of August 2014, 91 municipalities were participating in the C-PACE program.

To Learn More, Read:

OLR Report 2012-R-0027, *Issues with Property Assessed Clean Energy Programs*

OLR Report 2012-R-0133, *Property Assessed Clean Energy Programs*

OLR Report 2012-R-0291, *Proposed Federal Regulation on Property Assessed Clean Energy Programs*

OLR Report 2012-R-0464, *Commercial PACE Energy Programs*

What are Some of the Major Laws the Committee has Recently Passed?

Connecticut State House of Representatives

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Connecticut State Senate

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PA 13-119 requires electric suppliers to provide residential customers with written notice of any changes to the customer's generation rate 30 to 60 days before the customer's fixed term rate expires.

PA 13-298, § 58, requires the Green Bank to establish a program to finance residential energy efficiency and renewable energy measures using private capital, with loans repaid on the electric or gas bills.

PA 13-298 requires the gas companies to submit an expansion plan to provide service to customers currently on and off distribution lines.

PA 13-303 (1) expands the types of resources that count as Class I resources to meet the RPS, (2) allows the DEEP commissioner to solicit proposals from class I and large scale hydropower generators and direct the electric companies to enter into agreements with them under certain circumstances, and (3) allows large scale hydropower to count towards the RPS under certain conditions.

PA 14-75 expands consumer protections and notification requirements for retail electric suppliers.

PA 14-94, § 24, requires the Green Bank to report on residential PACE program options by January 1, 2015.

To Learn More, Read:

OLR Report 2013-R-0256, *2013 Acts Affecting Energy and Utilities*

OLR Report 2014-R-0170, *2014 Acts Affecting Energy and Utilities*

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